



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,670	12/14/2001	Agathe Subtil	216907US0X	4884
22850	7590	01/27/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			FORD, VANESSA L	
			ART UNIT	PAPER NUMBER
			1645	

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/014,670

Applicant(s)

SUBTIL ET AL.

Examiner

Vanessa L. Ford

Art Unit

1645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-10 and 30-47 is/are pending in the application.
- 4a) Of the above claim(s) 38-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-10, 34-37 and 44-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 30-33 and 38-43 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 1645

FINAL ACTION

1. Applicant's election of species D filed October 4, 2004 is acknowledged.
Claims 1-6 and 11-29 have been cancelled. Claims 30-33 and 38-43 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in the prior Office Action.

Objections/Rejections Withdrawn

3. In view of Applicant's amendment and response the following Objections and Rejections have been withdrawn:
 - a) Objection to the specification, page 2, paragraph 2 of previous Office action.
 - b) Objection to the specification, page 2, paragraph 3 of previous Office action.
 - c) Objection to the specification, page 3, paragraph 4, of previous Office action.
 - d) Rejection of claims 7-10 under 35 U.S.C. 112, first paragraph, page 3-6, paragraph 5 of previous Office action.
 - e) Rejection of claims 7-8 under 35 U.S.C. 102(a), pages 6-7, paragraph 6 of previous Office action.
 - f) Rejection of claims 7-8 under 35 U.S.C. 102(a), pages 6-7, paragraph 6 of previous Office action.

New Grounds of Rejection Necessitated by Amendment

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7-10, 34-37 and 44-47 are rejected under 35 U.S.C. 103(a) as unpatentable over Demers et al (*WO 99/58714 published November 18, 1999*) in view of Graffais et al (*U.S. Patent No. 6,559, 294 B1 published May 6, 2003*) and further in view of Kalman et al (*Nature Genetics, Volume 21, April 1999*).

Demers et al teach a method of identifying polypeptides by: a) providing genes under the control of the type III secretion machinery, b) transcriptional fusion between the promoters of the type III genes and a reporter gene are constructed and introduced into wild-type gram-negative bacteria and mutants of these bacteria constitutively secrete proteins *via* the type III secretion machinery and c) the expression of the presence or activity of the protein product is demonstrated *via* the reporter gene (page 3). Demers et al teach that *Shigella* bacteria are gram-negative organisms that contain type III secretion machinery (page 1).

Demers et al do not teach *Chlamydia* polypeptides.

Art Unit: 1645

Graffais et al teach that *Chlamydia* polypeptides can be secreted by the type III secretion machinery and detected by techniques known in the art such as for example using cloning combined with vectors allowing expression of the *Chlamydia* polypeptides fused to markers (column 40).

Demers et al nor Graffais et al teach *Chlamydia* polypeptides selected from the group consisting of CPn0105, CPn0287, CPn0330, CPn0334 CPn374, CPn379, CPn705, CPn0710, CPn0711, CPn0820, CPn821, CPn1016 and CPn1022.

Kalman et al teach *Chlamydia* polypeptides from *Chlamydia pneumoniae* and *C. trachomatis* genomes (see the Title). Kalman et al teach for example, CPn0105 (CT016) which is a GcpE protein that is conserved in both the *Chlamydia pneumoniae* and *C. trachomatis* genomes (Table 1, page 5).

It would be *prima facie* obvious at the time the invention was made to identify polypeptides as taught by Kalman et al using the method of detecting polypeptides using Type III secretion machinery because Graffais et al teach that *Chlamydia* polypeptides can be secreted by the type III secretion machinery and detected by techniques known in the art such as for example using cloning combined with vectors allowing expression of the *Chlamydia* polypeptides fused to markers as demonstrated by the teachings of Demers et al. Additionally, Kalman et al teach that comparative analysis of the *Chlamydia pneumoniae* and *C. trachomatis* genomes will significantly enhance the understanding of both pathogens and identification of genes shared between the two species supports the requirement for capabilities in biological systems that have, over long-term

Art Unit: 1645

association with mammalian cells, evolved to reduce metabolic capacities while optimizing survival, growth and transmission of these unique pathogens (page 385). It would be expected barring evidence to the contrary that *Shigella* bacteria comprising type III secretion machinery would be effective in identifying *Chlamydia* secreted proteins.

Status of Claims

5. No claims allowed.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Art Unit: 1645

7. Any inquiry of the general nature or relating to the status of this general application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Papers relating to this application may be submitted to Technology Center 1600, Group 1640 by facsimile transmission. The faxing of such papers must conform with the notice published in the Office Gazette, 1096 OG 30 (November 15, 1989). Should applicant wish to FAX a response, the current FAX number for the Group 1600 is (703) 872-9306.

Any inquiry concerning this communication from the examiner should be directed to Vanessa L. Ford, whose telephone number is (571) 272-0857. The examiner can normally be reached on Monday – Friday from 9:00 AM to 6:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette Smith, can be reached at (571) 272-0864.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Vanessa L. Ford
Biotechnology Patent Examiner
January 5, 2005


RITA MINNIFIELD
PRIMARY EXAMINER